Abstract

The invention relates to a support structure for a retractable and extendable flap (12) associated with an object (14), surrounded by a flowing fluid, comprising a shell profile (16) that has a fluid/aerodynamic low-drag form on the outer side and on the inner side forms a chamber (18) for at least partially receiving a device (20) for retracting and extending the flap (12).

(Fig. 1)

Reference Character List

10	Support structure
12	Flap or landing or trailing-edge flap
14	Object or mainplane of an aircraft
16	Shell profile
18	Chamber or volume or installation space
20	Device for retracting or extending the flap
22	Front shell of the shell profile
24	Rear shell of the shell profile
26	Direction of flow of the fluid
28	Mounting points on the object or mainplane
29	Front and rear force introduction rib
30	Separation line or separation point between the front shell and the rear shell
32	Front area of the front shell
34	Outer shell
36	Closing cover
38	Opening(s)
40	Cover
42	Side wall
44	Rear area of the front shell
46	Inner wall of the front shell
48	Longitudinal axis of the front shell
50	Intermediate wall of the front shell
52	Kinematic guiding device or kinematic device
54	Driving device or actuator system
56	Guide rail
58	Roller carriage
60	Connecting element
62	Rotary bearing
64	Control lever
66	Rotary bearing
68	Rotary bearing
70	Driving element or actuator
72	Drive rod

74 Rotary bearing
76 Rotary bearing
78 Rear spar of the mainplane of the aircraft
80 Rotary bearing.